

The Acquisition of English Prepositional Verbs by Jordanian EFL Learners at Al-Isra Private University

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Abstract: The present study investigated the acquisition of English prepositional verbs by 76 Jordanian EFL learners at Al-Isra Private University, Amman – Jordan. The study was intended to specifically find out whether the null – prep phenomenon is significantly observed in the Jordanian EFL learners' interlanguage grammar and whether the development of preposition stranding and preposition pied – piping in wh-questions and relative clauses would differ. A task involving grammaticality judgement and correction of individual sentences was given to the study subjects. Eight pairs of verb + preposition (V + P) were tested in three sentence types: declaratives, related wh-questions and relative clauses, each with the obligatory preposition omitted. Thus, the corpus consisted of 24 targeted sentences.

The study results indicate that the rise in the use of both preposition stranding and preposition pied – piping and the fall in the rate of the null – prep phenomenon occur more in instances of wh – questions than those of relative clauses across the three groups of proficiency. Additionally, and more importantly, the null – prep occurs rather similarly in both arguments and adjuncts. Interestingly enough, the present study results receive support from the studies reported in the literature and reflect how prepositional verbs are taught in Jordanian EFL classrooms. (**Keywords:** acquisition, null-prep constructions)

Introduction

Since the present study is intended to examine the issue of the acquisition of English prepositional verbs by Jordanian EFL learners at Al-Isra Private University in Amman – Jordan, it becomes quite important to explore some related literature on English prepositional usage. Dandan (1968) states that the correct usage of prepositions is the greatest problem for learners of English and believes that it is when prepositions have

اكتساب الطلبة الأردنيين الذين يدرسون اللغة الإنجليزية كلفة أجنبية بجامعة الإسرائ الخاصة الأفعال المتبوعة بحروف الجر الإنجليزية

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ملخص: أجريت الدراسة الحالية لاستقصاء اكتساب 76 طالبا أردنيا يدرسون اللغة الإنجليزية لغة أجنبية بجامعة الإسرائ الخاصة، عمان – الأردن الأفعال المتبوعة بحروف الجر (prepositional verbs) الإنجليزية، وملاحظة ظاهرة استخدامهم تراكيب لغوية تخلو من حروف الجر اللازمة لها (null – prep constructions) من نوع تلك التي تبدأ بإداة استفهام (wh-questions)، وتلك التي تحتوي على ضمير موصول (relative pronoun)، أو لجونهم إلى استخدام تراكيب لغوية تبدأ بإداة الاستفهام وأو يتخللها ضمير موصول وتنتهي بحرف الجر (preposition stranding)، أو تلك التي تبدأ بحرف الجر تتلوها أداة الاستفهام وأو الضمير الموصول الذي يتخللها (preposition pied-piping). كلف أفراد الدراسة بمهمة إصدار حكم على سلامة هذه التراكيب لغوية (grammaticality judgement)، وتصحيح جمل منفردة غير مقبولة قواعديا لأسباب أخرى غير خلوها من حروف الجر، واختيرت ثمانية أزواج من (الفعل + حرف الجر) (Verb + preposition (V+P). اختبر كل منها من خلال ثلاث جمل: خبرية (declarative)، سؤال يبدأ بإداة الاستفهام (wh-question) أو جملة تحتوي على ضمير موصول (relative pronoun)، محذوف من كل منها حرف الجر اللازم، وبهذا يصبح العدد الكلي لجملة الاختبار لكل فرد من أفراد الدراسة أربعاً وعشرين جملة مستهدفة (24 targeted sentences). وتشير النتائج إلى أن ازدياد استخدام أفراد الدراسة لكل من التراكيب اللغوية التي تبدأ بإداة الاستفهام وأو يتخللها ضمير موصول، وتنتهي بحرف جر (preposition stranding)، وتلك التي تبدأ بحرف جر تتلوها أداة الاستفهام وأو الضمير الموصول الذي يتخللها (preposition pied-piping)، والهبوط بمعدل ظاهرة استخدامهم تراكيب لغوية محذوف منها حروف الجر اللازمة لها (null – prep constructions) تظهر بشكل أكبر في أمثلة تلك التي تبدأ بإداة الاستفهام (wh-questions) من تلك التي تحتوي على ضمير موصول (relative pronoun) في مجموعات أفراد الدراسة الثلاث. إضافة إلى ذلك، وبشكل يدعو إلى الاهتمام، فإن التراكيب اللغوية التي تخلو من حروف الجر (null – prep constructions) تظهر بشكل مشابه نوعا ما في كل من نوعي متمات الجملة: (arguments و adjuncts). ومما يثير الاهتمام وبشكل كاف، أن نتائج الدراسة الحالية تتفق مع نتائج تلك الدراسات التي وردت في أدب الدراسة، وتعكس أيضا كيفية تعلم الأفعال المتبوعة بحروف الجر الإنجليزية في غرف الصف الأردنية المخصصة لتعليم اللغة الإنجليزية كلفة أجنبية. (الكلمات المفتاحية: اكتساب، تراكيب بأفعال غير متبوعة بحروف الجر).

literal equivalents and parallel distributions and usage in both L1 and L2 that learners have little difficulty in acquiring the second language prepositional usage. Quirk, Sidney, Geoffrey & Jan (1972) point out that English multi – word verbs are subcategorized into three types: (i) prepositional verbs (e.g., get off), (ii) phrasal verbs (e.g., put off), and (iii) phrasal – prepositional verbs (e.g., put up with). Among the three, prepositional and phrasal verbs are seemingly alike. One obvious similarity is the [V + P + (NP)] linear sequence.

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Zughoul (1973) stresses the fact that in English, prepositions are difficult to learn and teach. The source of the problem is that until recently linguists have not adequately described prepositions, and consequently, have not taught them systematically. Miura (1989) reports that Japanese students learning English specifically confuse prepositional verbs with phrasal verbs. Indeed, the dividing line in many cases is unclear. What is more, in some cases the same [V + P] combination can belong to more than one subclass with a corresponding difference in meaning. Examples from Miura (1989) illustrate this point:

- i. John [VP went [pp into the house]] ('to enter': prepositional)
- ii. John [VP [v went into] [NP the problem]] ('examine thoroughly': phrasal).

Most adult L2 learners may not systematically or consciously analyze the internal structure of a verb phrase. In a similar vein, Rastall (1994) points out that an area of particular difficulty in English for many ESL/EFL students has been the prepositional verbs because they are highly anomalous. Examples from Rastall (1994) illustrate this point: . . . *One may be accused of a crime, arrested for it and charged with it. We pay attention to something, but take notice of it*. Rastall notes that where the contribution of the preposition to the message is little or nothing, there is correspondingly an arbitrary fixing of the particular preposition required. This may explain the arbitrariness and anomalousness in many of the English prepositional usages. For example, in the context, *a respect – the truth*, only *for* is possible and in the context, *they accused him – theft*, only *of* can occur. Only *with* occurs in *consistent-the facts*. According to Rastall (1994), the selection of these dummy prepositions appears arbitrary and anomalous. As a result, the learning of prepositional verbs involves considerable costs in memorization and storage of information. As reported in the literature, this area is of particular difficulty in English for many ESL/EFL students. Although verbs may be classified as transitive or intransitive or both, it should be obvious that they will have to be subcategorized with respect to the full range of complements which they permit. For example, some verbs permit one or more PP complements. As Wesche (1994) suggests, learners' attention is to be directed to specific formal features of language within meaning – oriented activities, with the goal of developing increased grammatical accuracy in a formal L2 classroom. This kind of "attention – drawing" activity was referred to as "consciousness – raising" by Sharwood – Smith (1980), and later switched to "input enhancement" (Sharwood – Smith, 1993).

Dirven (2001) also points out that it is precisely in the area of prepositions and particles that the output of Cognitive Linguistics (CL) research in the 25 years of its existence is immense. Problems like phrasal verbs and prepositional verbs are regarded as a pain in the neck for national language processing (NLP) system (Sag, Baldwin, Bond, Copestake & Flickinger, 2002).

Villavicencio (2003) indicates that verb particle constructions (VPCs) are combinations of verbs and prepositional or adverbial particles. Macleod and Grishman (1998) in *Complex Lexicon*, Copestake and Flickinger (2000) in *English Resource Grammar (ERG)*, for example, display 12.564 and 533 phrasal verbs along with 4.039 and 337 verb particle constructions respectively. It is worth mentioning that these figures do not take into account subcategorization information, where a given verb particle construction can occur with more than one subcategorization frame, which certainly makes English prepositional verbs hard to learn and teach. This considerable cost in memorization and storage of information explains why many L2 learners omit the required preposition(s) from the targeted sentence(s) resulting in what is generally referred to in the related literature as *null-prep phenomenon*. On the other hand, a correct response involves adding a preposition in piping or stranding position. If L2 learners insert the preposition in the clause – final position, the result is *preposition stranding*, if the preposition is inserted in the clause – initial position, the result is *preposition pied – piping*. Studies done on the development of grammatical constructions involving the object of a preposition have revealed two options: *preposition stranding (PS)* and *preposition pied – piping (PiP)* (Haegamann, 1995). These two constructions are readily observed in *Wh-questions*, which are derived by *Wh-movement* as well as *relative clauses* as follows:

Preposition Stranding (PS)

- i. *Who did Sami show the picture to ?*
 - ii. *The man who(m) Sami showed the picture to was Ali.*
- Preposition Pied – piping (PiP)*
- iii. *To whom did Sami show the picture ?*
 - iv. *The man to whom Sami showed the picture was Ali.*

Several L2 studies investigating the development of *preposition stranding* and *preposition pied – piping* report that L2 learners omit the required prepositions in *wh-questions* and/or *relative clauses* producing what is generally referred to as '*null prep*' (Mazurkewich, 1985; Bardovi-Harlig, 1987; Klein, 1993a, 1993b, 1995a, 1995b; Klein and Casco, 1999 and Kao, 2001). That is, instead of the *wh-questions* and *relative clauses* shown in (i – iv) above, L2 learners' interlanguage grammar demonstrates (v. and vi) shown below:

Null – prep

- v. *Who did Sami show the picture ?*
- vi. *The man who(m) Sami showed the picture was Ali.*

The results of a number of studies of the interlanguage grammar of child and adult L2 learners explicitly exhibit instances of the *null – prep phenomenon* in *wh-question* constructions as well as *relative clauses* (Mazurkewich, 1985; Bardovi – Harlig, 1987; Klein, 1993a, 1993b, 1995a, 1995b; Klein and Casco, 1999 and Kao, 2001). The so – called *null – prep* constructions are also employed in both *wh – questions* and *relative clauses*, especially in the early level, before

preposition stranding and *preposition pied – piping* are attempted.

Erickson (1984) indicates that L2 learners' preference for *preposition stranding*, i.e., the insertion of the preposition in a clause final position over *preposition pied – piping*, i.e., the insertion of the preposition in a clause initial position for correction task and sentence types across the various proficiency levels is simply because they rarely, if ever, hear preposition pied – piping in the L2 data since it is limited to formal or written language. Mazurkewich (1985) points out that a constant increment is observed in the use of *preposition stranding* and *preposition pied – piping* as the level of competence in English increases, though instances of the former outnumber those of the latter.

Bardovi – Harlig (1987) also notes that there is such a growing tendency in English towards using *preposition stranding* instead of *preposition pied – piping* that many linguists have considered *preposition stranding* as the norm and the cases in which *preposition stranding* is impossible as exceptions. As such, she comments that salience or frequency might influence the acquisitional sequence of the learners of English. Bardovi – Harligh (1987) replicated her test for *wh-questions* and expanded it to include *relative clauses* as well to examine the acquisition of *preposition stranding* and *preposition pied – piping* across two constructions, one linguistically simple (*Wh-questions*) and the other linguistically more complex (*relative clauses*) in an attempt to compensate for the shortcomings of Mazurkewich's (1985) study. She administered the test to a group of subjects who have a variety of native languages and are at different levels of proficiency in English. The findings of her study revealed that the so-called *null-prep* constructions are employed in both *wh-questions* and *relative clauses*, especially in the early levels, before *preposition stranding* and *preposition pied – piping* are attempted. Bardovi – Harlig also points out that instances of *null – prep* diminish with a rise in the proficiency level. She attributes the emergence of *null-prep* constructions to lack of subcategorizational knowledge as Mazurkewich (1985) does. The results of her study further show that *preposition stranding*, which is assumed to be the marked structure, is acquired before *preposition pied – piping*, the presumably unmarked counterpart. This, she concludes, suggests that salience is also a determining factor in the acquisition order.

Quintero (1992) reports similar preferences for *preposition stranding* among adult Japanese ESL learners even though Japanese does not permit *preposition stranding*. Moreover, this study found that before learners attempt either construction, i.e., *preposition stranding* or *preposition pied – piping*, they employ the strategy of using no preposition at all. Klein (1995a) indicates that the L2 learners' interlanguage grammars should present no evidence of constructions forbidden in world languages. Building upon earlier studies of *preposition stranding* and *preposition pied –*

piping in English, Klein (1992, 1993a, 1995a, 1995b) and Kao (1996) also demonstrate that in acquiring both constructions in English, many L2 learners with accurate subcategorizational knowledge for the particular prepositional verbs omit the required preposition from a *wh-question* or a *relative clause* (i.e., *null-prep phenomenon*). Klein (1993a) suggests that *null-prep* constructions may result from overgeneralization from rare constructions such as the following:

i. *Lucy ate at that time.*

ii. *Ø what time did Lucy eat ?*

iii. *That's the time O Lucy ate. (Klein 1993a: 46)*

She also notes that language learners exhibit *null – prep* because of contradictory evidence for the presence / absence of prepositions in the input. Klein claims that the frequency of *preposition stranding* in informal language and the potentially marked nature of *preposition pied – piping* in English lead L2 learners to anti – *preposition pied – piping*.

In their study of English – French interlanguage, Dekydtspotter, Sprouse and Anderson (1998) suggest that *null – prep* manifests familiar argument – adjunct asymmetry. The asymmetry may be accounted for by positing the rule of preposition incorporation which implies that in *null – prep* constructions, the VP complement becomes an *NP* rather than a *PP* in such constructions. Accordingly, *null – prep* in L2 development displays a preliminary stage when learners form *wh-questions* by binding construals rather than *wh-movement*. Klein and Casco (1999) point out that L2 learners optionally select *null – prep* in *wh-questions* well up to the advanced level. Of course, the number of correct instances of *preposition stranding* and *preposition pied- piping* rises as general proficiency increases. Robust evidence of optional *null-prep* exhibited in both *adjuncts* and *arguments* is claimed to provide counterevidence to Dekydtspotter, Sprouse and Anderson's (1998) analysis. Refuting Dekydtspotter, Sprouse and Anderson's analysis of preposition incorporation, Klein and Casco rationalize that as *preposition stranding* is quite a rare phenomenon in most languages of the world, L2 learners' prior exposure to L1 usually leads to a bias against *preposition pied – piping*. Instead, L2 learners attempt *null – operator movement*, i.e., movement of less material (an *NP* out of *PP*) that is more economical. This analysis readily permits *null- prep* as an interim strategy for *adjuncts* as well as *arguments*.

Lakkis and Abdel Malak (2000) conducted a study to examine the extent to which 55 Arab students enrolled in the University Orientation Program (UOP) at the American University of Beirut (AUB) rely on their L1 prepositional knowledge in acquiring an understanding of prepositional usage in English. A 40 – item test was constructed at the end of one semester. The collected and analyzed data were categorized into three areas: structures in which the verb in one language takes a preposition and in the other does not; structures that use

a different preposition in the two languages and structures in which more than one preposition in one language was possible in the same place in the other language.

The researchers concluded that in the case of prepositions, students rely on transfer from L1 to L2 to judge the appropriate usage of prepositions. Thirty-two subjects, for example, used the preposition that is closer to Arabic when two prepositions in English are possible, twenty-two corrected the errors when verbs that use different prepositions in L1 and L2 were in structures with the corresponding L1 prepositions and a small number corrected the errors when verbs that do not take prepositions in the Arabic equivalent were used in structures without prepositions. The data show that students' continuous exposure to correct prepositional usage allows them to master these structures (verb + preposition) since the frequency of occurrence of a structure promotes the correct usage of prepositions.

In her study of the acquisition of English prepositional verbs by Japanese EFL learners, Kao (2001) further examines Klein's (1995b) report that *preposition stranding* is the generally preferred form and her account that may be due to "the frequency of *preposition stranding* in formal language and the potentially marked nature of *pied-piping* in English". Kao also points out that L2 learners attempt *preposition stranding* because they choose changing one place (resulting in *preposition stranding*) rather than two (resulting in *preposition pied – piping*). It is worth mentioning that Kao warns that Klein's (1995b) findings should be interpreted with caution since her targeted sentences raise the possibility of *preposition stranding*. Her *relative clauses* all include the complementizer *that* instead of the *wh*-pronouns. As the subjects have only been required to correct the sentences, they have been free to change one place (PS) or two (PiP). It is naturally expected that the subjects favor a minimal correction (inserting a preposition leading to *preposition stranding PS*) over a two-step process (inserting a preposition and changing *that* to a relative pronoun leading to *preposition pied – piping (PiP)*).

Accordingly, Kao (2001) intended to replicate Klein's (1995b) study to verify her claims. She included relative pronouns rather than *that* in her *relative clauses* to avoid the pitfall in Klein's study. The results of her study evidences instances of *null-prep* constructions though to a far lesser degree than those of Klein's study. In addition, *preposition stranding* turned out to be the preferred option and the subjects showed the preference by rejecting even correct *preposition pied-piping* sentences in favor of *preposition stranding*. Kao found that five out of six grammar references used by Japanese students recommend them to leave the preposition at the end of the sentence when the *relativized NP* is the object of a preposition although both *preposition stranding* and *preposition pied – piping* are introduced in such books. These grammar

references generally state that the *wh-word/ phrase* should be placed at the beginning of the sentences in the case of *wh-questions*. Kao points out that some L2 learners may avoid *preposition pied – piping* because it may seem to violate the grammar rule taught in the grammar books. This idea is indeed supported by the results of an ad hoc follow – up test given to the subjects different from those who took part in the main experiment. Kao also referred to Sharwood – Smith's (1980, 1993) distinction between "*consciousness raising*" and "*input enhancement*" which is related to the input / intake dichotomy. The former implies that the learner's mental state is altered by the input; that is, all input becomes intake and the latter, on the other hand, implies only that certain features of language input can be made salient to learners. Kao comments that as the results of Sharwood – Smith's show, although formal instruction is intended to help the learners acquire a rule (e.g., prepositional verbs and their co-occurrence restrictions or *wh*-question formation), the product the learner takes away is the presumably preferred construction: *preposition stranding*. Accordingly, Kao highlights the effect of instruction on the learner's performance in the second language.

Kallmeyer and Scheffler (2004) propose an analysis for *preposition stranding* and *preposition pied-piping* of *wh-questions* that takes into account syntax and semantics of these problematic constructions. They are problematic since they violate the Condition on Elementary Tree Minimality (CETM). A completely different analysis of *preposition stranding and preposition pied-piping* constructions that has been further pursued for semantics in Kallmeyer (2003) is the possibility to start from the *wh-word*, to adjoin first all material inside the NP that embeds the *wh-word* and then adjoin the main verb of the question. This works for *preposition pied-piping and preposition stranding* cases. The analysis Laura proposes is consistent with the proposals made by Chung-hye (2002) for simple *wh-questions* and *relative clauses*.

As it was discussed above, extensive investigations done on the acquisition of English prepositional verbs and their related constructions: *preposition pied – piping (PiP)* and *preposition stranding (PS)* have generally produced mixed results. Specifically, the three most recent investigations, Dekydsporter, Sprouse and Anderson (1998), Klein and Casco (1999) and Kao (2001) have made rather contradictory claims about the issue of the development of *preposition pied – piping* and *preposition stranding* at which some L2 learners show evidence of *null – prep* constructions. In an attempt to resolve the controversies above, this study intended to further investigate the issue of the development of *preposition pied – piping* and *preposition stranding* in the Jordanian EFL interlanguage grammar. It was attempted to see how the Jordanian EFL learners' interlanguage grammar would compare with that of other L2 learners discussed in the

literature. In other words, the present study was conducted to specifically find out whether the *null-prep* phenomenon is significantly observed in the Jordanian EFL learners' interlanguage grammar and whether the development of *preposition pied-piping* and *preposition stranding* in *relative clauses (RCs)* and *wh-questions* would differ. Further investigation of the results may hopefully help to resolve the controversies. The present study specifically attempted to answer the following questions:

1. a. Do Jordanian EFL learners show evidence of *null - prep* in *relative clauses* and / or *wh - questions* ?
- b. How does the interlanguage grammar of Jordanian EFL learners at various levels of proficiency differ in terms of *null - prep* constructions ?
2. a. Are there any differences between *wh-questions* and *relative clauses* in terms of the emergence of *preposition pied - piping* and/or *preposition stranding* and *null - prep constructions* ?
- b. How does the interlanguage grammar of Jordanian EFL learners at various levels of proficiency differ in terms of the emergence of *preposition pied - piping* and/or *preposition stranding* and *null - prep constructions* ?
3. Do Jordanian EFL learners show evidence of *null - prep* in *adjuncts* and/or *arguments* ?

Method Subjects

A total of 76 Jordanian EFL learners studying at Al-Isra Private University Language Center during the summer session of 2003-2004 constituted the subjects of the present study. The main body of the students at the Language Center studies English courses ranging from (English 099) to (English 102). The study subjects' performance was matched against the contents of the textbooks they were studying during the above - mentioned session, i.e., *Pre - intermediate Matters (Eng. 099)*, *Intermediate Matters (Eng. 101)* and *Upper intermediate Matters (Eng. 102)* (Bell & Gower, 1993). *Pre - intermediate Matters* is aimed specifically at pre - intermediate level learners (level 1), *Intermediate Matters* is aimed specifically at intermediate level students (level 2) and *Upper intermediate Matters* (level 3) builds on the integrated, balanced approach established in *Intermediate Matters* with an emphasis on meeting the needs of higher level learners through content, grammar, pronunciation and writing. As one of the objectives of the present study was to compare the performance of Jordanian EFL learners at different proficiency levels, namely, low, mid and high groups, sampling was carried out in the following way: The subjects of the study were selected from levels 1 (N = 28), 2 (N = 28) and 3 (N = 20) which best represented the above-mentioned levels of proficiency respectively. It is worth mentioning that the low, mid and high groups

had already been exposed to the grammatical constructions under study, i.e., *preposition pied - piping* and *preposition stranding*. From among all classes at levels 1, 2 and 3, two classes were randomly selected and the instrument utilized in the present study was administered to all the students in each class.

Materials and Procedures

The present study instrument for data collection comprised a grammaticality judgement and correction of individual sentence task. A total of 8 pairs of verb + preposition (V + P) were tested in the task: *concentrate on*, *run into*, *belong to*, *pay for*, *laugh at*, *talk to*, *apologise to* and *look after*. Each verb was initially presented in a *declarative* sentence to test the subcategorization knowledge of the subjects. In addition, two sentences were developed for each verb: one with a related *wh-question* and the other with a *relative clause* each with a prepositional verb to check the differences between the two constructions. Thus, there was a corpus of 24 targeted sentences, but there was also an equal number of correct instances of *preposition stranding (PS)* and *preposition pied-piping (PiP)*. In addition, 12 correct sentences and an equal number of incorrect ones were included as *filler sentences* (see Appendix). It is worth mentioning that in all the targeted sentences the *obligatory preposition* was omitted as shown in (8 i-iii):

- 22 i: *This man usually looks these children while their mother is in hospital.*
 ii: *Which children does this man look while their mother is in hospital?*
 iii: *These are the children who(m) this man usually looks while their mother is in hospital.*

The present study subjects were asked to judge the acceptability of the items. In case a sentence was judged unacceptable, the subjects were required to correct it, for instance, inserting a preposition in the target sentences. Acceptance of the *declarative* sentence with no preposition suggested that the subject did not have the subcategorization knowledge for the verb and his/her responses to the *wh-question* and *relative clause* constructions did not count. However, if a subject rejected the *declarative* sentence and inserted the missing preposition, then his/her responses to the *wh-question* and the *relative clause* constructions were further analyzed as he/she appeared to possess the required subcategorization knowledge for the prepositional verb. That is, this particular subject knows that the verb in this instance requires a *prepositional phrase (PP)* complement. In the case of *wh-question* and *relative clause* constructions, acceptance of the sentence would be considered as a *null-prep* response. Alternatively, the result of rejecting the sentence in the test and inserting the preposition in the initial position of the *relative clause* was considered as *preposition pied-piping (PiP)* and rejecting the sentence in the test

and inserting the preposition in a clause final position was considered *preposition stranding (PS)*.

With regard to the **validity of the instrument** of the present study, the items of the instrument were prepared by the researcher. Then they were checked by four faculty members from both the English Language Department and the Langugae Center and four faculty members from the Faculty of Education at Al-Isra Private University. Their comments and recommendations were taken into consideration and the items of the instrument were duly modified.

As for the **reliability of the instrument** of this study, the grammaticality judgement and correction of individual sentence task was administered to a sample of forty Jordanian EFL learners chosen from the population of the study. Learners were tested, then retested after two weeks. Pearson's method was used to work out the reliability between the means of the learners' test and retest. The reliability coefficient was 0.85.

Results

Results related to questions 1a and 1b:

1. a. Do Jordanian EFL learners show evidence of *null – prep* in *relative clauses* and / or *wh – questions* ?
- b. How does the interlanguage grammar of Jordanian EFL learners at various levels of proficiency differ in terms of *null – prep constructions* ?

The present study results in terms of the emergence of the *null-prep* phenomenon in both *wh-questions* and *relative clauses* across the three proficiency groups, i.e., the low, mid and high groups appear in Table (1).

Table (1): Null-prep Results by Subjects' Proficiency Level

Prof. Level	No. of Subj.	No. of Subcat	Null-prep Wh-Q No. %	Null-prep Relat. No. %
Low	28	70/224	46 (65.7)	53 (75.7)
Mid	28	110/224	59 (53.6)	68 (61.8)
High	20	98/160	36 (36.7)	42 (42.9)
Total	76	278/608	141 (50.7)	163 (58.6)

Note: Prof. = proficiency; Subj. = subjects; Subcat. = correctly subcategorized declaratives
 Wh-Q = Wh-questions; Relat. = relative clauses

Table (1) shows that although the subcategorization knowledge, i.e., knowledge that a particular verb in a particular sentence requires a particular *prepositional phrase (PP)* complement, of the Jordanian EFL learners increases with their proficiency, the interlanguage grammar of the subjects who possess the relevant subcategorization knowledge at the three levels of proficiency reveals *null-prep*. The low group accurately subcategorized 70 *declarative* sentences. However, they accepted 65.7 and 75.7 percent of the corresponding *wh-questions* and *relative clauses*, respectively without the preposition. The mid group accurately subcategorized 110 *declaratives*. Yet, they accepted 53.6 and 61.8 percent of the *wh-questions* and *relative clauses* without the preposition. The high group who had accurately

subcategorized 98 *declaratives* accepted 36.7 percent of the *wh-questions* and 42.9 percent of the *relatives* without the preposition.

The percentages in Table (1) apparently indicate that the occurrence of *null-prep* in *relative clauses* (58.6%) is greater as compared with *wh-questions* (50.7%) . This shows that the *null-prep* phenomenon can be similarly observed in both *relative clauses* and *wh-questions*, hence providing a positive answer to the study question 1 a posed earlier. Regarding question 1 b, the occurrence of *null-prep* seems to decline as the proficiency level increases (*wh-questions*: Low = 65.7%, Mid = 53.6% and High = 36.7%; *relative clauses*: Low = 75.7%, Mid = 61.8% and High = 42.9%, hence providing a positive answer to question 1b.

Results related to question 2a:

Are there any differences between *wh-questions* and *relative clauses* in terms of the emergence of *preposition stranding* and/or *preposition pied-piping* and *null-prep constructions* ?

Null-prep, preposition pied-piping and *preposition stranding* results in *wh-questions* and *relative clauses* are displayed in Table (2).

Table (2): Null-prep, Preposition Pied – piping and Preposition Stranding Results in Wh-questions vs. Relative Clauses

Structure	Null-prep (%)	PiP (%)	PS (%)
Wh-Q.	50.7	22.5	26.8
Relat.	58.6	18.9	22.5

Further examination of the results in Table (2) shows evidence of *null-prep* in both *wh-questions* and *relative clauses* (50.7% and 58.6%, respectively) despite correct subcategorization knowledge indicated in the corresponding *declaratives*. The results also suggest that in both constructions, i.e., *wh-questions* and *relative clauses* Jordanian EFL learners favor *preposition stranding* (*wh-questions*: 26.3% and *relative clauses*: 22.5%) over *preposition pied-piping* (22.5% in *wh-questions* and 18.9% in *relative clauses*), hence providing a positive answer to question 2a.

Results related to question 2b:

How does the interlanguage grammar of Jordanian EFL learners at various levels of proficiency differ in terms of the emergence of *preposition stranding* and/or *preposition pied-piping* and *null-prep constructions* ?

Table (3) displays the differences among the three proficiency groups in terms of the emergence of *null-prep, preposition pied-piping* and *preposition stranding*.

Table (3): Results of Wh-questions vs. Relative Clauses by Proficiency Level

Prof. Level	Null-prep %		PiP %		PS %	
	Wh-Q.	Relat.	Wh-Q.	Relat.	Wh-Q.	Relat.
Low	65.7	75.7	8.6	6.1	25.7	18.1
Mid	53.6	61.8	18.3	15.1	28.1	23.1
High	36.7	42.9	22.3	20.1	41	37

As shown in Table (3), *null-prep* forms a stage of development at the three proficiency levels tested prior to the acquisition of *preposition pied-piping* and/or *preposition stranding* in both *wh-questions* (Low: 65.7%; Mid: 53.6%; High: 36.7%) and *relative clauses*

(Low: 75.7%; Mid 61.8% and High: 42.9%). However, *null-prep* gradually diminishes in both constructions, i.e., *wh-questions* and *relative clauses* as proficiency increases. Table (3) apparently indicates that the rise in the use of both *preposition pied-piping* and *preposition stranding* and the fall in the rate of *null-prep* generally occur more in *wh-questions* than *relative clauses*, except for *preposition stranding* in the high group, hence providing a positive answer to study question 2b.

To further examine whether particular V + P combinations restrict the preference of *preposition pied-*

piping, *wh-questions* and *relative clauses* were analyzed across individual (V + P)s, i.e., *concentrate on*, *run into*, *belong to*, *pay for*, *laugh at*, *talk to*, *apologise to* and *look after* including *preposition stranding* and *null-prep*. The results appear in Tables (4) and (5). Table (4) depicts the study subjects' responses within correct subcategorization for each V + P, i.e., a particular subject knows that a particular verb in an instance requires a prepositional phrase (PP) complement in *wh-questions*.

Table (4): Subjects' Responses within Correct Subcategorization for each V + P in Wh-questions NNS (N = 76)

V + P	Correct Subcat. Number correct		Responses within Null-resp.		Correct PS		Subcategorization PiP	
	N	%	N-resp.	%	N-resp.	%	N-resp.	%
concentrate on	70	92.1	6	8.6	63	90.0	1	1.4
run into	50	65.8	5	10.0	45	90.0	0	0.0
belong to	66	86.8	8	12.1	56	84.8	2	3.0
pay for	65	85.5	10	15.4	53	81.5	2	3.1
laugh at	43	56.6	11	25.6	31	72.1	1	2.3
talk to	59	77.6	11	18.6	46	78	2	3.4
apologise to	63	82.9	8	12.7	53	84.1	2	3.2
look after	67	88.2	3	4.5	62	92.5	2	3.0

Note:

V + P = verb + preposition; NNS = non – native speakers of English; correct subcat. = correct subcategorization for each V + P in *declaratives*; N – resp. = number of responses

Table (4) shows that particular V + P combinations, i.e., *concentrate on*, *run into*, *belong to*, *pay for*, *laugh at*, *talk to*, *apologise to* and *look after* do not restrict the

subjects' preference for *preposition stranding* in *wh-questions*.

Table (5): Subjects' Responses within Correct Subcategorization for each V + P in relative clauses NNS (N = 76)

V + P	Correct Subcat. Number correct		Responses within Null-resp.		Correct PS		Subcategorization PiP	
	N	%	N-resp.	%	N-resp.	%	N-resp.	%
concentrate on	70	92.1	6	8.6	59	84.3	5	7.1
run into	50	65.8	12	24.0	35	70	3	6.0
belong to	66	86.8	7	10.6	45	68.2	14	21.2
pay for	65	85.5	4	6.2	50	76.9	11	16.9
laugh at	43	56.6	4	9.3	25	58.1	14	32.6
talk to	59	77.6	10	16.9	44	74.6	5	8.5
apologise to	63	82.9	8	12.7	43	68.3	12	19.0
look after	67	88.2	4	6.0	49	73.1	14	20.9

Note:

V + P = verb + preposition; NNS = non – native speakers of English; correct subcat. = correct subcategorization for each V + P in *declaratives*; N – resp. = number of responses

Table (5) shows that particular V + P combinations do have some effect on *relative clauses*. It appears that particular lexical items, (e.g., 32.6% for *laugh at*) evoke much more *preposition pied-piping* than others (e.g., *concentrate on* or *run into*). This only occurred in *relative clauses*.

Results related to question 3:

Do Jordanian EFL learners show evidence of *null-prep* in *adjuncts* and/or *arguments* ?

Table (6): Results of Null-prep in Arguments vs. Adjuncts by Proficiency Level

Prof. Level	Arg. (%)	Adj (%)
Low	45	55
Mid	44	56
High	42	58

Table (6) shows the differences among the three proficiency groups in terms of the use of the *null-prep*. in both types of complement, i.e., *adjuncts* and *arguments* (Low: Arg. = 45% Adj = 55%; Mid: Arg. 44% Adj. = 56%; High: Arg. = 42% Adj = 58%). Further examination of the data in Table (6) reveals evidence of the *null-prep* phenomenon in *Adjuncts* (Adj) as well as *Arguments* (Arg), hence providing a positive answer to study question 3.

Discussion

It is reported in Table (1) that Jordanian EFL learners in the present study evidently omitted the prepositions in both *wh-questions* and *relative clauses*. Moreover, they attempted *null-prep* constructions even in the high proficiency group although the *null-prep* occurrence decreased with the rise in proficiency. This is consistent with the findings of earlier research on *preposition*

stranding, preposition pied-piping and the null-prep phenomenon (Mazurkewich, 1985; Bardovi-Harlig, 1987; Klein, 1995a, 1995b; Klein and Casco, 1999; Kao, 2001). The occurrence of the phenomenon in the subjects' L2 acquisition attests to *null-prep* as an undeniable stage in L2 acquisition and shows irrelevance of *null-prep* to "language specific input factors". This is in line with the findings of Klein (1995a). The subjects may have exhibited *null-prep* constructions because of the contradictory evidence for the presence/absence of preposition in their L2 data. This is also in line with the findings of Dandan (1968), Klein (1992, 1993a, 1995a, 1995b) and Lakkis and Abdel Malak (2000). Another possible explanation is that the subjects may have attempted *null-prep* constructions just for ease of processing or just as a communication strategy or they may have processed the targeted sentences simply for meaning whether or not the sentences are grammatical and not noticed and stored the different construction, i.e., *null-preposition* manifest in the L2 data. This justification receives support from Erickson's (1984) experiments; VanPatten's (1990) work and Rastall's (1994) studies. The emergence of *the null-prep phenomenon* in both *wh-questions* and *relative clauses* may be attributed to the lack of accurate subcategorizational knowledge of verbs for their prepositional complements. This justification receives full support from Zughoul (1973) and Bardovi-Harlig (1987). Tables (2) and (3) reveal the emergence of *preposition stranding*, i.e., the insertion of the preposition in a clause final position and greater tendency of the subjects in the three proficiency groups, i.e., the low, mid and high groups to use it. This is in line with the findings of Bardovi-Harlig (1987) Klein (1995b) and Kao (2001). In fact, the emergence of *preposition stranding* (PS) and the subjects' preference to use it over *preposition pied-piping*, i.e., the insertion of the preposition in a clause initial position might be due to the frequency or salience of *stranded prepositions* in the oral language. This explanation receives support from Bardovi-Harlig (1987) and Kao (2001). Although the authors of grammar books all indicate there are two options when the *wh-word/phrase* is the object of a preposition, they also emphasize the importance of having the *wh-word* at the beginning of the sentence. This is why the *preposition pied-piping* option appears to violate the grammar rules for *wh-questions* that the present study subjects have been taught. It may also be the case that the subjects' familiarity with such rules led them to favor *preposition stranding* (PS) over *preposition pied-piping* (PiP). Therefore, subjects might just try to use the structure they are familiar with and avoid the unfamiliar one i.e., *preposition pied-piping*. Once L2 learners are exposed to the two options for *wh-formation*, they may include both. This, as reported in the literature, may never happen because the general principle for the so-called *wh-formation* overrides the exceptional rule, i.e., *preposition pied-piping*.

The subjects' preference for *preposition stranding* for the correction task across the three proficiency groups and sentence types, as reported in the literature and shown in Tables (4) and (5), is simply because, generally speaking, L2 learners rarely, if ever, hear *preposition pied-piping* in the L2 data since it is limited to formal or written language. This justification receives support from Erickson, (1984). Another possible explanation for the study subjects' preference for *preposition stranding* may be attributed to their early and frequent exposure to English constructions with the frozen *preposition stranding formula*, i.e., the insertion of the preposition in a clause final position, which draws their attention to *the stranded prepositions* and leads them to the preference of *preposition stranding*.

The frequency of *the stranded prepositions* in the subjects' L2 input may propel them to *anti-preposition pied-piping*. This is in line with the findings of Erickson (1984) and Bardovi-Harlig (1987). In a similar vein, for the purpose of the present study, *wh-questions* and *relative clauses* were analyzed across individual (V + P)s, including *preposition stranding* and *null-prep* to further determine whether particular (V + P) combinations restrict the preference of *preposition pied-piping* on the part of the subjects. Table (4), for example, shows that particular V + P combinations, i.e., *concentrate on, run into, belong to, pay for, laugh at, talk to, apologise to and look after* do not restrict the subjects' preference for *preposition stranding* in *wh-questions*. On the other hand, Table (5) shows that these factors do have some effect on *relative clauses*. It appears, for example, that particular lexical items (e.g., 32.6% for *laugh at*) evoked much more *pied-piping* than others (e.g., *concentrate on or run into*). Once again, this only occurred in *relative clauses*. Syntactically speaking, *wh-questions* in the present study involved only single-clauses while *relative clauses* are derived from a base structure consisting of more than one sentence. It is usually a relationship brought about by the so-called embedding process. There are, generally speaking, two rules (viz., relative pronoun substitution and relative pronoun fronting) operating on the relative clause construction as in:

Output of the base: *This is the problem (he concentrates on the problem)*

Relative pronoun substitution: *This is the problem he concentrates on which).*

Relative pronoun fronting: *This is the problem which he concentrates on.*

Another possibility, however, is to front the preposition along with its relativized object, as in:

This is the problem on which he concentrates. This possibility makes *relative clauses*, linguistically speaking, more complex than *wh-questions*. This justification is in line with the findings of Bardovi-Harlig (1987) Han (2002), Kallmeyer (2003) and Kallmeyer and Scheffler (2004). Interestingly, in the three proficiency groups as shown in Table (3), *the null-prep phenomenon* was retained longer in the *relative*

clauses although the gradual reduction in its use co-occurred with a general rise in the use of *preposition stranding* as well as *preposition pied-piping* in both *wh-questions* and *relative clauses*. This is consistent with Bardovi-Harlig's (1987) finding which reveals that acquiring *preposition stranding* and *preposition pied-piping* in *relative clauses* is more difficult than in *wh-questions*. The fact that the 24 targeted sentences in the test included relative pronouns rather than the complementizer *that* as well as the observation of similar *null-prep phenomenon* in both *wh-questions* and *relative clauses* contradicts Kao's (2001) view that L2 learners attempt it because they choose changing one place (resulting in *preposition stranding (PS)* instead of two (resulting in *preposition pied-piping (PiP)*).

However, the results corroborate the minimalists' view that derivations are directed by the economy principles and that the most economical option always wins out (Klein and Casco, 1999). Since *preposition stranding* involves movement of less material (an *NP* out of *PP*) than *preposition pied-piping* (the whole *PP*), the most economical derivation winning the competition is *preposition stranding*. In a similar vein, a comparison between the number of *preposition stranding* and *preposition pied-piping* constructions attempted by the subjects in the three proficiency groups, i.e., the low, mid and high groups, as shown in Table (3), revealed a smooth rise in both *wh-questions* and *relative clauses*. In addition, instances of *preposition stranding* outnumbered those of *preposition pied-piping*. Interestingly enough, the high group evidenced an abrupt increase in the use of *preposition stranding* in both *wh-questions* and *relative clauses*, but a sudden decrease in the use of *preposition pied-piping* in both constructions. This unexpected fall may be reasonably due to the instruction in Jordanian EFL classrooms which focuses on the supremacy of *preposition stranding* over *preposition pied-piping* which may seem to violate the grammar rule taught in grammar books, i.e., most grammar books recommend students to leave the preposition at the end of the sentence when the relativized *NP* is the object of a preposition, or in the case of *wh-questions*, the references generally state that the *wh-word/phrase* should be placed at the beginning of the sentences. This explanation is indeed supported by the results of an ad hoc follow-up test given to the subjects different from the ones taking part in Kao's (2001) main experiment. Another possible explanation concerning the unexpected fall in the use of *preposition pied-piping* by the high group is that *preposition pied-piping* construction is often felt to be awkward in informal English, especially in speech. In addition, the L2 learners, particularly, those who show accurate responses, and as reported in the literature, indicate that *preposition stranding* is the overwhelmingly preferred form, that is, when faced with a *wh-question* or *relative construction* with an omitted preposition, they correct it by inserting the required preposition at the end of the clause (resulting in *preposition stranding (PS)*). It is also

possible that the potentially marked nature of *preposition pied-piping* in English and the frequency of *preposition stranding* in informal language lead L2 learners to *anti-preposition pied-piping*. These two justifications receive support from Klein (1992, 1993a, 1995a, 1995b) and Lakkis and Abdel Malak (2000).

Table (6) shows that the three proficiency groups in the present study attempted *null-prep* in both types of complement, i.e., *adjuncts* and *arguments* rather similarly (Low: *Arg* = 45% *Adj* = 55%; Mid: *Arg* = 44% *Adj* 56%; High = *Arg* 42% *Adj* = 58%). This reflects no distinction between the two constructions as far as the *null-prep phenomenon* is concerned. Interestingly enough, this study finding is consistent with Klein and Casco's (1999) analysis which casts doubt on the speculated contrast between *adjuncts* and *arguments*. Additionally, and more importantly, it is possible that *null-prep* attempted by the subjects is a consequence of *null-operator movement* operating similarly in both complement types. It is worth mentioning that *null-operator movement* implies that the *V + P* complement becomes an *NP* rather than a *PP* in *null-prep* constructions, which readily permits *null-prep* as an interim strategy for *adjuncts* as well as *arguments*. This is indeed supported by the results of Klein and Casco's (1999) analysis.

Conclusion

In conclusion, the results of the present study reveal that the so-called *null-prep phenomenon* occurs in the subjects' L2 data. Interestingly, the occurrence of this phenomenon decreased with the rise in proficiency across the three proficiency groups, i.e., the low, mid and high groups. Another interesting finding is that the subjects favor *preposition stranding*, i.e., the insertion of the preposition in a clause final position over *preposition pied-piping*, i.e., the insertion of the preposition in a clause initial position in the 24 targeted sentences which were *declaratives*, related *wh-questions* and *relative clauses*, each with the obligatory preposition omitted. A comparison between the number of *preposition stranding (PS)* and *preposition pied-piping (PiP)* constructions attempted by the subjects in the three proficiency groups showed a smooth rise in both *wh-questions* and *relative clauses*. Instances of *preposition stranding* outnumbered those of *preposition pied-piping*. Additionally, and more importantly, *null-prep* was retained longer in *relative clauses* although the gradual reduction in its use co-occurred with a general increase in the use of *preposition stranding* and *preposition pied-piping* in both *wh-questions* and *relative clauses*. Interestingly enough, the *null-prep phenomenon* occurred rather similarly in the two types of complements, i.e., *adjuncts* and *arguments*. As such, the results of the present study reveal how particular pairs of verb + preposition (*V + P*), for example, *concentrate on*, *run into*, *belong to*, *pay for*, *laugh at*, *talk to*, *apologise to* and *look after* are taught in Jordanian EFL classrooms. It is suggested that Jordanian EFL classroom learners receive more

comprehensible L2 data for the purpose of their L2 “consciousness-raising / input enhancement” as used by Sharwood Smith (1980, 1993). This suggests that in a formal Jordanian EFL classroom, learners’ attention is to be directed to specific formal features of language within meaning-oriented activities (e.g., *prepositional verbs and their co-occurrence restrictions or wh-question formation*) with the goal of developing increased grammatical accuracy. Conscious attention / “attention-drawing” activity, for instance, pointing out that *concentrate* always takes a particular preposition, namely, *on* or analyzing the internal structures of various prepositional phrases along with fine-tuned comprehensible L2 input certainly affects Jordanian EFL classroom learners’ performance which is measured in this study. It is suggested that these two learning strategies or options are ‘taught’ or ‘encouraged’ in Jordanian EFL classrooms. The product the Jordanian EFL learners come up with is the seemingly preferred construction(s), for instance, *preposition stranding* i.e. the insertion of the preposition in a clause final position and/or *preposition pied-piping*, i.e. the insertion of the preposition in a clause initial position.

Since students rely on transfer of prepositions from L1 and L2 to judge the appropriate prepositional usage as concluded by Lakkis and Abdel Malak’s (2000) study, it is advisable to use their L1 knowledge of prepositions for structures that use equivalent prepositions in both L1 and L2. On the other hand, instructors of English whose L1 is Arabic should point out the differences between L1 and L2 to their students whenever there are verbs or expressions in the L1 and L2 that have different structures that take prepositions or that have no equivalent in one of the languages. The instructors of English should call the students’ attention whenever there is a rule that simplifies the prepositional usage. In addition, instructors need to explain the differences when more than one preposition is possible for the same verb. To allow students to master (verb + preposition) structures, instructors must continuously expose them to correct prepositional usage since the frequency of occurrence of a structure promotes the correct usage of the preposition.

In the case here, Jordanian EFL teachers may encourage their learners to memorize and practice or suggest that they memorize and practice the so-called V+P sequences or English prepositional verbs as a whole. Evidence for the operation of the memorization as well as practice strategy comes from Jordanian EFL learners’ performance in the examinations and from their errors as well. The EFL teacher should be on the alert for the errors of his learners in English prepositional verbs, especially for the recurrent ones. These can be listed and corrected through practice arranged by the teacher at an appropriate phase of each English lesson. In language learning, there is no substitute for practice. Constant practice of English prepositional verbs on the part of

Jordanian EFL learners and their EFL teachers should occupy adequate class time.

The acquisition of the English prepositional verbs, as the results of the present study show, is an area of particular difficulty in English for Jordanian EFL learners because learning such verbs involves considerable costs in memorization and storage of information. It is advisable, in this respect, to recycle English prepositional verbs continuously, i.e., they should re-appear again and again in different contexts, but with increasing depth or in terms of their value, i.e., more useful English prepositional verbs should come before less useful ones, their frequency of use, i.e., the more frequent the English prepositional verb, is, the more useful it is, their closeness to the immediate environment of Jordanian EFL learners and their complexity, i.e., simpler English prepositional verbs should come before more complex ones in the same syllabuses.

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Appendix: Test Sentences

I. Target Sentences (Ungrammatical)

The targeted sentences in this part are *declaratives*, related *wh-questions* and *relative clauses*, each with a *prepositional verb*. The (targeted) sentences are presented, however, with *the obligatory preposition omitted*. Eight pairs of verb + preposition (V + P) are tested: *concentrate on*, *run into*, *belong to*, *pay for*, *laugh at*, *talk to*, *apologise to* and *look after*. Thus, the corpus consists of 24 targeted sentences.

1. He usually **concentrates** this particular problem.
2. Which problem does he usually **concentrate** ?
3. This is the problem which he usually **concentrates**.
4. Mary **ran** a handsome fellow two days ago.
5. Which fellow did Mary **run** two days ago ?
6. This is the fellow who(m) Mary **ran** two days ago.
7. This coat **belongs** that man.
8. Which man does this coat **belong** ?
9. This is the man who(m) this coat **belongs**.
10. He always **pays** his evening meal.
11. Which meal does he always **pay** ?
12. The evening meal is the meal which he always **pays**.
13. They are **laughing** the comic strips.
14. Which strips are they **laughing** ?
15. These are the strips which they are **laughing** ?
16. He usually **talks** this lady.
17. Which lady does he usually **talk** ?
18. This is the lady who(m) he usually **talks**.
19. He **apologised** that old man this morning.
20. Which man did he **apologise** this morning ?
21. This is the man who(m) he **apologised** this morning.
22. This man usually **looks** these children while their mother is in hospital.
23. Which children does he usually **look** while their mother is in hospital.
24. These are the children whom(m) he usually **looks** while their mother is in hospital.

II. Preposition Stranding (PS) (Grammatical)

The corpus also includes an equal number of correct instances of *preposition stranding* and *preposition pied-piping*:

1. This car **crashed into** this wall.
2. Which wall did this car **crash into** ?
3. This is the wall which this car **crashed into**.
4. He **shouted to** this man from the other side of the street.
5. Which man did he **shout to** from the other side of the street ?
6. This is the man who(m) he **shouted to** from the other side of the street.
7. He **writes to** this lady from time to time.
8. Which lady does he **write to** from time to time ?
9. This is the lady wh(om) he **writes to** from time to time.
10. He is **interested in** this type of work.
11. Which type of work is he **interested in** ?
12. This is the type of work which he is **interested in**.

III. Preposition Pied – piping (PiP) (Grammatical)

1. This bus **collided with** this car.
2. **With** which car did this bus **collide** ?
3. This is the car **with** which this bus **collided**.
4. The students are **worrying about** the English exam.
5. **About** which exam are the students **worrying** ?
6. This is the exam **about** which the students are **worrying**.
7. He is **talking about** his favorite topic of conversation now.
8. **About** which topic of conversation is he **talking** now ?
9. This is the topic of conversation **about** which he is **talking** now.
10. Rami **went into** that house ten minutes ago.
11. **Into** which house did Rami **go** ten minutes ago ?
12. This is the house **into** which Rami **went** ten minutes ago.

IV. Filler Sentences (Grammatical)

In addition, the corpus included 12 correct sentences as filler sentences.

1. Ali saw his next door neighbour two days ago.
2. Who did Ali see two days ago ?
3. This is the neighbour Ali saw two days ago.
4. The lady was reading this interesting magazine.
5. Which magazine was this lady reading ?
6. This is the magazine the lady was reading.
7. The guest arrived the other day.
8. Which day did the guest arrive ?
9. That is the day the guest arrived.
10. This university graduated 350 students last year.
11. Which year did this university graduate 350 students ?
12. This is the year that this university graduated 350 students.

V. Filler Sentences (Ungrammatical)

The following incorrect filler sentences are ungrammatical for reasons other than prepositions.

1. They is leaving for Madaba next week.
2. Did they left for Madaba last week ?
3. Which city they leave last week ?
4. My wife are making the bed in the bedroom.
5. What is your wife making it in the bedroom ?
6. Did your wife made the bed in the bedroom ?
7. Sami are buying a shirt for his brother.
8. What did Sami bought for his brother ?
9. Did Sami bought a shirt for his brother ?
10. I watch the semi-final football match on television last night.
11. Which match did you watched on television last night ?
12. Did you watched the semi-final football match on television last night ?